

IN THE CLAIMS

1. (currently amended) A prosthetic disc replacement device for use between vertebrae in the spine, comprising:

a first plate containing a first through slot and a first pivot pin spanning said first slot;

a second plate, spaced apart from said first plate, containing a second through slot and a second pivot pin spanning said second slot;

a first fixation component coupled to said first plate for rotation about said first pivot pin from an unactuated position within the interior of said device to an actuated position exterior to said device;

a second fixation component coupled to said second plate for rotation about said second pivot pin from an unactuated position within the interior of said device to an actuated position exterior to said device;

and an actuation member, capable of insertion between said first and second plates of said device to shift said first and second fixation components through said first and second through slots to the exterior of said device to affix said device between the vertebrae.

2. (currently amended) The device of claim 1, wherein said first and second fixation components each contain a first camming edge which tapers away from said pivot pin within said device when said device is [unactuated] in its unactuated position and a second affixing edge which tapers away from said pivot pin outside said device when said device is in its actuated position.

3. (original) The device of claim 1, wherein said first and second fixation components lie in the same plane.

4. (original) The device of claim 3, wherein said first edges of said fixation components contact each other when said components are in said unactuated position.
5. (original) The device of claim 1, wherein said first plate and said second plate maintain a parallel orientation.
6. (original) The device of claim 1, wherein each of said first and second plates have a hollow interior and an end containing an aperture, such that a bone growth promoting substance may be injected into the interior of each plate.
7. (original) The device of claim 1, wherein said first and second fixation components maintain a side by side relationship within the interior of said device when said component is in its unactuated position.
8. (cancelled).
9. (original) The device of claim 6, wherein said bone growth promoting substance comprises bone morphogenetic protein (BMP).
10. (original) The device of claim 1, wherein first and second plates are composed of bone.
11. (cancelled).
12. (original) The device of claim 2, wherein said actuation member contains a first surface for contacting said camming edge of said first fixation component and a second surface for contacting said camming edge of said second fixation component.

13. (currently amended) The device of claim 2, wherein when said first and second fixation components are [at] in the actuated [portion] position, said affixing edge of each component is [[held tightly in the cancellous bone of the vertebrae.]] configured to be held tightly in the cancellous bone of the vertebrae.

14. (cancelled)

15. (currently amended) A method of installing a prosthetic disc replacement device between vertebrae in the spine, comprising the steps of:

a. placing between vertebrae of a spine a device, comprising a first plate containing a first through slot and a first fixation component, rotatably coupled within said first slot, a second plate parallel to said first plate containing a second through slot and a second fixation component rotatably coupled within said second slot;

b. and inserting a actuation member between said first and second plates to shift said first and second fixation components out of the respective plates to affix said fixation components into adjacent vertebrae.

16. (original) The method of claim 15, further comprising:

a. using a syringe to inject a bone growth promoting substance into an aperture within each plate when said device is between the vertebrae.

17. (original) The method of claim 16, wherein said bone growth promoting substance comprises bone morphogenetic protein (BMP).